

Parapsychology in the People's Republic of China: 1979-1989

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ABSTRACT: From 1979 to 1982, research on "exceptional functions of the human body" (EFHB) swept through the People's Republic of China (PRC). Two protagonists emerged to carry the resulting scientific controversy to the highest political forum. The opponent of EFHB was a vice-chairman of the Chinese Academy of Science. The proponent was a physicist regarded internationally as "the father of Chinese space technology." After an inconclusive collaborative test of the country's best-known psychics, the Communist Party ruled that both sides must cease public discussion. From 1983 to 1986, interest shifted to gifted adult psychics. Research was conducted quietly at major universities but primarily under defense-related auspices in Beijing, where gross PK effects were reported. Meanwhile, civilian research interest in parapsychology expanded under the ancient rubrics of "qigong" and "Traditional Chinese Medicine." In 1987, a set of seminal PK experiments was reported in the *Acta Biophysica Sinica* from Qinghua University. In the same year, official approval was granted for the study of EFHB. From 1987 to 1989, interest in qigong mushroomed until, according to news reports, there were 20 million participants, including top leaders of the Communist Party. The favoring of parapsychology has persisted despite the Beijing events of the spring of 1989.

Although references to the existence and application of parapsychological phenomena are frequently found in the major books of ancient Chinese history dating back 2,000 years, there is also a present-day Chinese interest in such effects. The most recent scientific inquiries began in late 1978 when a group of scientists tested Tang Yu, a 12-year-old boy in Sichuan Province, for his reported "Exceptional Functions of the Human Body" (EFHB), a widely used Chinese expression for extrasensory perception (ESP) and psychokinesis (PK). It was a propitious time for such a discovery because the chaos of the Cultural Revolution had subsided, whereas economic reform had not yet begun. The country's intellectuals were starting to exercise some freedom of choice in selecting what to study, and they did not yet feel under pressure from their regular work at

¹ In accordance with Chinese custom, Chinese family names precede given names in this paper except in the author's by-line, where the U.S. custom of family-name-last is followed to facilitate indexing.

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the universities and research institutes as they would several years later. Likewise, for a period of several years, children, who were often the best psi subjects, were under less pressure to devote all of their time to school study.²

This paper provides an informal historical account of psi-related activities in China between 1979 and 1989 (inclusive). The senior author has divided this period into three phases. The first phase covers 1979–1982, the second covers 1983–1986, and the third covers 1987–1989. The information presented herein is drawn from public sources, from the senior author's personal involvement in parapsychological research before coming to the U.S., and from his continuing contacts with friends he left behind.

PHASE I (1979–1982): THE RE-DISCOVERY OF ESP

Early in the 20th century, a Chinese psychical study society was formed as a result of Western influence, but the society did not flourish. In the 1960s, reports of Western and Russian psi studies appeared in several popular Chinese technical magazines, but shortly thereafter the topic was criticized as being "idealistic" and symbolic of "declining capitalism" (Hsin, 1975). From the Hsin document we may infer that interest in parapsychology was strongly discouraged during the Cultural Revolution, which extended from 1966 to 1976.

The first phase of present-day Chinese psychic studies (1979–1982) was characterized by its popularity. A news film, "Do You Believe?," was produced by the Central Newsreel and Documentary Studio and shown in countless cinemas and on television in 1981. As a result, many hundreds of children claiming to have EFHB were found throughout the nation. Groups to investigate these phenomena were formed in almost all educational and research centers in large cities, and even in some elementary and secondary schools. According to a recent study (Yi, 1987), at least 500 formally trained scholars from more than 100 centers joined the effort. Papers published in *Nature Journal (NJ)*, which had supported the EFHB research from the beginning,³ reported that 40–63% of children around age 10 were found to have EFHB to some extent in a large-scale ESP investigation in Beijing (Cheng et al., 1979; He et al., 1980). The term EFHB was expanded to include PK after it was discovered that subjects with ESP could sometimes also affect the state of small objects, for example, bend a match or reset the hands of a watch. The senior author, while still an undergraduate student, was able to repeat many of the reported ESP and PK experiments successfully with his young friends.

² "Psi" is the generic term for psychic phenomena and includes both ESP and PK.

³ *Nature Journal (Ziran Zazhi)* is a major Chinese scientific monthly, published in Shanghai at a technical level comparable to that of the British journal, *Nature*.

These replications were performed under fairly tight conditions and without much difficulty, usually by just telling these friends what others had claimed to be able to do and letting them try immediately. In many of the senior author's tests the subject was not allowed to touch the pre-sealed envelopes.

In the early 1980s, nearly every issue of *NJ* reported new discoveries of EFHB. Researchers used a variety of analytical instruments in an attempt to detect any "radiations" that might be produced by the children's efforts. In these investigations, signals ranging from infra-red emissions modulated by low audio frequencies to gamma photons were detected, although many of the effects were weak. Traces of exposure were found on protected x-ray films, and various physical, chemical, and biological detectors registered an "output." The researchers were excited, convinced that their discoveries were not artifactual but were of scientific importance, and would lead possibly to a great scientific breakthrough.

However, Dr. Qian Xuesen,⁴ a leading physicist, and several other top researchers pointed out that these signals were probably only secondary manifestations of an underlying information carrier, "qi" (which means "air," "gas," "spirit," or "vital energy" in Chinese), and not the underlying carrier itself (Qian, 1981).⁵ As the research continued, scientists began to realize how weak and unstable the EFHB effects were. Having been isolated from the rest of the world, Chinese researchers were now independently re-discovering evidence for psychic phenomena that had been studied in the West for 100 years. In the course of these re-discoveries, Chinese researchers became increasingly aware of the difficulties and complexities of the subject.

An unofficial preliminary organization called the *Chinese Human-Body Science Association (Preparatory Committee)* was formed in 1980 under the aegis of *Nature Journal*.⁶ This preparatory committee was nationwide in scope and sponsored two national conventions that were held in Shanghai (1980) and Chongqing (1981). The conventions were somewhat informal and were attended by amateur enthusiasts of differing backgrounds as well as by serious scientists. To accommodate the large number of papers sent to *NJ*'s editors, publication of a monthly news-

⁴ Transliterated as "Tsien Hsueh-Sen" in his early publications.

⁵ In transliteration, the Chinese phonetic symbols *q*, *x*, and *z*, for example, correspond in Mandarin to sounds that cannot be represented by a single letter in English. Expressed without benefit of the international phonetic alphabet, when they appear at the beginning of a syllable, these letters are approximately equivalent to English language combinations *ch*, *sh*, and *ts*, respectively. Thus, the approximate pronunciation of *qi* is "chee." The pronunciation of persons' names is further confused by the fact that some professionally established Chinese were allowed to keep their previous English spellings after the 1950s transliteration reform.

⁶ In PRC, all organizations of whatever kind must be officially approved. Once approved, an organization is usually provided financial support for its operational activities, depending on the general area of the subject and the size of the membership.

letter, the *EFHB Bulletin*, was begun in 1981, staffed by employees from *NJ*. However, most of the major research results in this phase were published in *NJ*.

The invited speech by Chen Hsin and Mei Lei at the joint convention of the Parapsychological Association and the Society for Psychical Research held in Cambridge, England, in 1982 (Chen & Mei, 1983) provides an authoritative summary of Chinese parapsychological activity at that time. The presence of the PRC delegation at the convention was in itself a remarkable event, for it indicated interest on the part of the Chinese government.⁷

Among the many EFHB reports on this early phase, some seemed experimentally naive and others were too briefly written to be understood. There was, however, a residuum of challenging or puzzling findings that Western parapsychologists might wish to pursue (Chai & Zhao, 1981; Chen et al., 1981; EFHB Research Group of Yunnan University, 1981; Lin et al., 1981; Zhao et al., 1983).

The total meaning of this spontaneous nationwide quasi-public activity is difficult to determine. It was a social phenomenon, but it was not science. Given the circumstances, certain features of this activity might reasonably be inferred. Among the many organizers and managers of EFHB demonstrations there must have been diverse motivations and competence. Among the recruited children there must have been wide variations in psychic ability and social sophistication. One would expect attempted cheating by the children if only because ESP cannot always be produced upon demand.

On the other hand, very few of these young people would have learned

⁷ When word of this parapsychological activity reached the U.S., psychologist S. Krippner of Saybrook Institute arranged an investigative tour of PRC in 1981. His entourage included physicist H. E. Puthoff of SRI International and sociologist M. Truzzi of Eastern Michigan University. Independent descriptions of this trip were published by Krippner (pp. 206–209 in Dong, 1984), Puthoff (1983), and Truzzi (1985). Participation in three ESP experiments with children in Hefei and Beijing was reported by C. K. Jen (1983) of Johns Hopkins Applied Physics Laboratory as a visiting professor to PRC in 1980–1981. Dr. L. C. Teng, an Associate Director of the Fermi National Laboratory at Batavia, Illinois, participated in a strikingly successful ESP experiment with a child subject while making a lecture stop at the Institute of Modern Physics in Lanchou in 1980 (Teng, 1981). A detailed account of Chinese parapsychological activity in the years 1979–1982 will be found in Dong (1984), a Chinese-American lecturer and writer who studied Chinese occult practice for several years and visited PRC for 6 weeks in 1981. More recently, a group of American skeptics made a lecture and “preliminary testing” tour in the PRC under newspaper auspices (Kurtz et al., 1988). Truzzi (1982, 1987) has assembled two bibliographies of English-language items on Chinese parapsychology, including many non-archival publications.

It is worth noting that Western visitors to the PRC, whether or not they have strong credentials, will probably be disappointed by the amount and quality of the information they can gather in a limited time of stay. Without an official invitation to an institution doing this research, they are likely to meet only casual experimenters (who abound there as they do in the U.S.). In any case, visitors to PRC are unlikely to be dealt with frankly because there is pressure against informal communication to foreigners on sensitive topics—which parapsychology remains to this day.

the professional skills of the magician. Consequently, in those cases where children were tested for EFHB singly or in small groups in the immediate presence of intelligent and worldly-wise observers using previously prepared and sealed targets, the only real danger of malobservation would seem to lie in a lapse of attention by the observers if the testing period were prolonged.

It is interesting in this connection that the senior author gained a strong impression, both from his own experience and from experimenters known to him, that the accuracy of ESP results (or the effectiveness of PK efforts) varied inversely as the length of time of the trial, once the subject(s) had reached a "favorable state." For instance, it was repeatedly observed in multiple-observer ESP trials (typically, recognizing "by ear" Chinese characters secretly presealed in boxes) that when the children responded within a few minutes, perhaps 90% of their answers were correct. ("Qi is coming," they would say.) In many cases, they were able to respond in two or three seconds and, when this occurred, the results were nearly always right. However, if they could give only a hesitating description after many minutes, the results were most often wrong, as though they were simply guessing.⁸

There is still another observation that may bear upon the evidentiality of the Chinese experiments with childhood EFHB. Young girls, aged from 6 to 12 years, were considered the best ESP candidates, and a majority of the experiments in the early phase were done with them. However, as they grew a little older or, more accurately, usually after menstruation started, their ESP ability ceased. This observation is consistent with ancient phenomenological qigong theory, which claims that "qi" can come from two sources: "Yuan-qi" (primary "psycho-body energy," which is acquired at birth and disappears as one matures), and secondarily through qigong practice.

The senior author has reason to believe that there can be interference with psi effort and that it need not come from a hostile person. Under his direction, four children, who were well known to him, were doing an ESP demonstration experiment. The experiment was proceeding with a high rate of success until a college student in the audience, who had studied qigong for several months but was still a beginner, decided to attempt the announced task. The ESP of the children suddenly disappeared, and they reported a feeling of being confused and disturbed.

TWO EMINENT SCIENTISTS, THE GREAT DEBATE, AND THE PARTY'S RULING

The public interest in psi and the resulting unprecedented large-scale inquiry by academic scholars drew criticism soon after the movement

⁸ The senior author accepts child-EFHB as genuine on the basis of his own experiments and work by others with whom he is personally acquainted.

began. The most famous attacker was Mr. Yu Guangyuan, who was backed by many highly placed scientists. On the other hand, there were other eminent scientists who defended the study of psi. They were represented by Dr. Qian Xuesen (the previously mentioned physicist).

Mr. Yu Guangyuan, a social scientist, held many powerful positions. He was, among other things, a vice-chairman of the Chinese Academy of Science, vice-director of the Academia Sinica's Science and Technology Committee, and director of the Institute of Marxism, Leninism, and Thoughts of Mao Zedong.

Mr. Yu's papers on psi, most of which were very long, appeared after May, 1981 in scholarly publications such as *Chinese Social Sciences* (Yu, 1982a) and *Chinese Philosophical Almanac* (Yu, 1982b). His longest, of book length, was scheduled for serialization in the monthly periodical *Knowledge Is Power*, a popular science magazine, beginning in November, 1981. During this time, Yu visited many major cities throughout the country, giving lectures at universities and government-called meetings in opposition to psi and sponsoring a small, short-lived periodical named *Investigations of the EFHB*.

Interestingly enough, Mr. Yu refused to participate in any psychic tests. He is reported to have said that his children, his secretary, and many of his friends had gone to see EFHB demonstrations and had been convinced that they were genuine. He preferred not to attend such shows lest he, too, be deceived by stage magic.

Yu's scientific arguments were extremely weak. Checking through Yu's papers, the senior author has found that Yu's opposition was based upon the following two arguments:

1. The claimed parapsychological phenomena are contrary to Marxism, Leninism, dialectical materialism, and currently known scientific laws and therefore cannot be true.
2. There have been many cases of psi trials, both in China and in other countries, that were found to be fraudulent. Considering the improbability of the phenomena, common sense tells us that all such claims must be hoaxes.

It is obvious that these two arguments are logically and methodologically incorrect. The existence of a phenomenon is not precluded by any theory, and a part of available evidence does not necessarily represent the whole. Indeed, Yu's arguments were so fragile that, after June, 1982, when publication of his multi-part paper was halted by the Party's decision (which will be discussed in detail below), the *NJ* editors managed to obtain the unpublished portions and published them in full in their own informal *EFHB Bulletin*.

The scientists and leaders supporting Yu were eager to halt the study of psi. As a result, the Academia Sinica held a meeting in Beijing on February 24, 1982, attended by 4,000 scholars, to criticize the psi studies and to call for "fair but strictly controlled" trials in which both sides would participate. The results of these trials would lead to a final judgment and

thus close the issue. This meeting was given extensive coverage by both the *Xinhua News Agency* and the *People's Daily* newspaper, the two most important government-authorized media. Their news dispatches expressed strong disapproval of the psi researchers.

The person leading the other side of the debate was Dr. Qian Xuesen, the "father of Chinese space technology." He studied at MIT in the 1930s and completed his Ph.D. at the California Institute of Technology's Jet Propulsion Laboratory, where he was subsequently appointed Goddard Professor of Jet Propulsion. At one time he was director of the rocket section of the U.S. National Defense Scientific Advisory Board. Although the Americans granted Dr. Qian's request to return to China in 1955 in exchange for 11 American pilots from the Korean War, it was later rumored that the U.S. government regretted the decision, for they believed that without Qian, China would not have been able to join the nuclear and space clubs so soon (Dong, 1984, pp. 90-91).

Dr. Qian first showed his support of qigong research publicly in June, 1980, when he visited *NJ*. In a private conversation with the journal's editors, Dr. Qian is reported to have said:

No one has ever undertaken to discover the ultimate capabilities of the human body. Henceforth, we should use science and technology to study human potential. Thus, we should study Chinese traditional medical theories, qigong, exceptional functions of the human body, and so on. In the end, all this will result in developing the exceptional functions you have been studying. There is much opposition to the integration of Western and Chinese medicine, including qigong and EFHB. It is permissible to use different approaches in research. Many natural phenomena are still not explained by science, and this is the way it has been throughout the history of science. We need a leader who is strong enough to face critics, and that is why I have come to visit and to show my respect for your journal. (*Nature Journal* editorial report, 1980)

Dr. Qian answered Mr. Yu's challenge by emphasizing that it is important to perform experiments rather than merely to stick with existing theories. Dr. Qian believed that anthropic science⁹ would become a major branch of modern science and technology and attain the same standing that the natural sciences, the social sciences, the behavioral sciences, mathematics, systems theory, military theory, and the fine arts have today (Qian & Chen, 1988). He also predicted that a breakthrough in anthropic science would necessarily cause a new revolution in science and technology, thereby changing the future of mankind completely. He believed that such a change would be far more profound than the scientific revolution of the early 20th century, which was brought about by the development of relativity and quantum theory (Qian, 1983).

⁹ The term "anthropic" was officially used in English translations in the early phases but was later replaced by "somatic," although the Chinese term remained the same.

These arguments were politically effective, in part because of Dr. Qian's important position and his influence upon Chinese policy makers, especially the military leaders. Another high ranking political and military leader, Mr. Zhang Zhenhuan, who was at that time Chairman of the Commission of Science, Technology, and Industry for National Defense, endorsed open discussion of EFHB in response to Dr. Qian's call for support of the field. Mr. Zhang later became the first president of the China Society of Somatic Science (CSSS).

Although he rarely performed a formal experiment himself, Dr. Qian observed many trials by qigong masters and, on several occasions, experienced in person the power of their "qigong external emission" ("qigong waiqi" or "exterior energy"). Also convinced by what they had seen were many highly respected senior natural scientists, who expressed their support for the proponents of EFHB. These scientists included Wong Gangchang, Zhao Zhongrao, Bei Shizhang, Mao Yisheng, Qian Weichang, Tan Jiazhang, Yang Longsheng, Wang Dezhaoh, Zhu Guangya, Tang Aoqing, a chemist who was later elected president of the Academia Sinica, and Zhou Guangzhao, the current president, Tang's successor.

In an attempt to settle the issue fairly, a joint trial was arranged by the Party's National Committee of Science in April, 1982. A disagreement concerning the design of the experiments arose between the opposing factions before the trial was formally begun, and as a result, some members of the anti-psi faction withdrew, saying that they would not acknowledge the validity of the outcome of the trial. Nevertheless, the trial did proceed at Beijing Teacher's College with individuals of both factions in attendance. The results, by and large, were negative, with the exception of those produced by "Z" (see later identification). On the basis of Z's repeated and strongly positive results, the pro-psi members of the joint committee took the offensive and published a report of the trial in the first issue of an "internally circulating" magazine, *EFHB Research* (Combined Committee for EFHB Tests, 1983). Meanwhile, the anti-psi faction chose not to make any report.

As usually happens in a centrally-controlled country, when no one wants to be on the losing end of an issue, both sides turned to the Party for a resolution. Dr. Qian Xuesen wrote a letter to the Party's Central Propaganda Department asking the Department to protect the freedom of science, while Yu Guangyuan continued to push for a ban on psi as an approved research topic. Dr. Qian's letter was forwarded to the Central Committee, and finally the leaders made a judgment. The ruling came down on the side of Yu, but permission was granted for psi researchers to continue on a restricted scale. The decision was announced on May 13, 1982, by Hu Yaobang, who was then the Party's General Secretary. The Party's Propaganda Department also issued two announcements in April and June giving basically the same instructions:

The EFHB is not [an officially accepted] subject for our scientific research. Before proof of the phenomena is firmly established, our media should not

propagandize or make any comment about any test or experiment. These rules are believed to be appropriate and justified, so they must be observed. However, we may allow a minority group of scholars to continue their study [of] the topic and let them publish an internally circulated publication for the consideration of concerned scientists, and permit those who are interested to read it and to continue their research efforts. (Hu, 1982)

The ruling was obeyed. *Nature Journal* stopped carrying papers on psi research; *Knowledge is Power* ceased publication of Yu's serialized paper as of June, 1982. Psi enthusiasts in universities and institutes were not permitted to include their psi studies as part of their formal work load or to freely distribute results of their psi research to the general public. Thus, the first phase of modern Chinese parapsychological research, which had been characterized by its large-scale effort, ended.

PHASE II (1983-1986): QUIET RESEARCH CONTINUES

In contrast to the earlier years, the scale of research in the second phase was much smaller and quieter. Following the disappearance of the coverage of psi by the news media, most ordinary people soon forgot about the subject, and the rest incorrectly assumed that the psi reports were fraudulent and had been banned by the Party.

A majority of the former investigators also gradually drifted away from the subject, not because they doubted the genuineness of the observed results or because they had lost interest, but for more pragmatic reasons: The economic reform had started and, in accordance with the newly adopted policies, promotions were no longer based on the number of years a scholar had worked in his unit, but more and more upon his achievements. Since EFHB study was "not a recognized research topic" and could not be counted as formal work, it was not considered in making promotion decisions. Also, the new open-market policy created many opportunities for intellectuals to make money by employing their knowledge in support of the country's modernization. These opportunities were highly attractive to the nation's professional thinkers, who had been in an inferior economic position for so long. In addition, keen competition to be admitted to the better universities and even to the better high schools was forcing psychic children and their worried parents to decline further invitations to participate in psi testing. Such activities seemed irrelevant to the future careers of the children.

Nevertheless, as allowed by the Party, psi groups did survive and continue their former endeavors; and the field moved in new directions through the efforts of Dr. Qian Xuesen and his fellow military officers, including Mr. Zhang Zhenhuan. It was no secret that in late 1981, Qian and Zhang had successfully set up a psi study site known as the 507 Institute, or the Institute of Space Medico-Engineering (ISME). This Institute, located in suburban Beijing, is under the defense-related Spaceflight Department. It had been established earlier in the 1960s to provide medical

support for the astronauts of the proposed Chinese space effort, but in the early 1970s the idea of manned space flight was postponed due to more urgent considerations relating to the nation's reconstruction. Thus, a team with considerable relevant experience was already in place. Included were two researchers strongly interested in EFHB, Prof. Chen Hsin, Director of the Institute, and Prof. Mei Lei, both of whom were able to attend the 1982 joint convention of the Parapsychological Association and the Society for Psychical Research in England. Research proceeded smoothly, in part because those who opposed psi research had almost no power within the military system, and also because open attack on psi research was no longer permitted due to the Party's ruling.

At the beginning, the ISME team reviewed reports from both inside and outside the nation. In Professors Chen and Mei's 1982 address at Cambridge University they reported only the results previously obtained by Chinese researchers outside the ISME, in addition to the ideas offered by Dr. Qian. As time progressed, the ISME team became independent and isolated from the civilian research community. The senior author heard complaints from university professors that they no longer had access to the psychic subjects with whom they had previously worked and, furthermore, that they were not very well informed as to what was occurring within the ISME. Of course, the civilian researchers were pleased to see that there was a formally endorsed, well-supported team to continue research in the subject, but they increasingly found that they had become outsiders with almost nothing to do. They also realized that, in the defense-related unit, practical applications of psi might have a higher priority than basic scientific inquiries. Indeed, the ISME team had many advantages. Psi study was their official task, and as in other top defense-related institutes, they were well equipped and well funded. They had the money to attract and support the country's top psychics and they actually did so. Several famous subjects became full-time co-operators, including Zhang Baosheng, who had been formerly reported in many papers as "Z."

Born in 1955 in Nanjing city, Jiangsu Province, Zhang Baosheng showed his ESP abilities as early as 1976. He was tested by a group of local psi researchers and came to Beijing in early 1982, at a time when the skeptical pressure against the EFHB teams was at its peak. There is little doubt that Zhang helped save the study of psi because he was the only one able to show distinctly positive results under the scrutiny of the skeptics in the "joint trial" described above.

In his early personal experience with Zhang Baosheng, gained over months of close observation, the senior author found that, as with other major psychics under loose control, Zhang was able to perform numerous incredible feats. Most of these involved apparent PK, and many were done in the way the senior author or others requested, with the targets seemingly chosen at random. For example, Zhang caused objects, such as someone's photo identification card or personal name stamp, to move to another room which Zhang had not entered, or caused a torn personal letter to be restored to a single piece.

Zhang Baosheng later did many experiments under what were said to be tightly controlled conditions. A series of PK experiments performed with him by a group of 19 researchers headed by Prof. Lin Shuhuang of the Physics Department of Beijing Teacher's College, was reported in *EFHB Research* (Lin et al., 1983).¹⁰ This experimental report illustrates the typical target-selection and sealing techniques used, and is a good example of how such experiments were conducted in China. The paper reported special skills of this psychic, such as extracting small papers with identifying signs, chemically active objects, and marked live insects from sealed containers. Tamper-resistant sealing methods involved concealed unexposed photo film and envelopes impregnated with a chemical marking dye.

By 1984, Zhang Baosheng was under the control of the ISME team. He lived within the Institute compound and, as reported by visiting friends, was provided with an assigned car, special meal service, a color TV, VCR, camera, etc. Many times he was called upon to demonstrate his PK in front of highly placed Party or military leaders. (Those demonstrations were, of course, not under tight control.) Rarely did the civilian researchers who had worked with him get the chance to reach him again. However, the ISME team did report some highly unusual experiments. One resulted in a PK film, photographically recording at 400 frames per second the passing of a marked medical pill through glass, including frames showing the penetration process (Huo, 1987). It is an important sign of the military support of the field that this film was awarded a "Scientific Research Achievement Prize" of the second class by the Spaceflight Department later in 1987, a recognition which must be unique in the history of parapsychology, especially in that it happened in an Eastern communist country.

Some of his investigators wondered if Zhang Baosheng ever cheated in his demonstrations. They suspected that he did so to "save face" when he was not able to succeed honestly after extended effort in front of high-ranking guests. His supporters believed, however, that the formally reported results were genuine because they were under tight control. The senior author feels it may never be known if Zhang used trickery since he has never admitted, as do many present-day qigong masters, that he is sometimes without power.

Two hypotheses, among others, present themselves. It is possible that Zhang Baosheng (who has no appreciation of science) lives in his own mystical world where his perhaps somewhat limited psi abilities have distorted in his thinking the barrier between reality and fantasy, so that it is a matter of indifference to him whether he uses psi or legerdemain to achieve his immediate goal.

Alternatively, Zhang's bizarre, apparent PK abilities may reflect a psycho-physical reality that mocks our presumptions of what is possible.

¹⁰ After the Party's 1982 ruling, the informally published *EFHB Bulletin* attained quasi-official status as a restricted-circulation journal under the name *EFHB Research* and continued to be produced by the personnel of NJ.

Given the facts that micro-PK involving small forces and energies has been established in principle and that gross PK has been presumptively established both by spontaneous cases and by experiments in the U.S. and the USSR, the authors believe it is proper for a scientist to suspend judgment when confronted by accounts such as the above.

In this period, civilian researchers throughout the nation also continued their study of EFHB, although mostly in their off-duty hours. Psi effects were still mentioned under the name of qigong in many papers published in the magazines of Traditional Chinese Medicine and qigong practice, and even sometimes in *NJ*, because such papers were considered to be medically related, or descriptive of physical exercises, and thus not in violation of the Party's ruling. Several popular qigong magazines, such as *Qigong*, *China Qigong*, *Oriental Qigong*, and *Qigong and Science*, which were begun in the early 1980s, were able to continue. These effectively prepared the way for the subsequent expansion of the qigong movement.

PHASE III (1987-1989): THE QIGONG MOVEMENT RESURGES AND GAINS NEW SUPPORT

As a special physical practice, qigong¹¹ (sometimes referred to as "the internal action of psycho-body energy," breath control," or "breath exercise") originated in China, where it has a rich history. Records show that it had been systematically developed as early as 500 B.C. and that it was widely accepted and practiced in every Chinese dynasty. There are various schools of qigong, each emphasizing different techniques to attain its own specific purpose. In general, qigong practice concerns concentration of thought, rejecting external stimuli, adjusting breath, and "controlling the movement of qi." It is agreed by all schools that, by sending qi to certain parts of the body through the "meridian channels" and by practicing in certain ways, psi abilities can be attained. Although the initial purpose of practice is to regain the qi lost while growing up, there are said to be abilities more profound than psi that can be attained by higher level qigong masters who can "freely control qi by the mind and cause it to flow through the entire body." Many people in China believe that there are quite a few such masters, who work as ordinary people and almost never admit their secret power. They have views on matter, mind, life, and the universe very different from ours and have no interest in fame or money. Occasionally, they show a little of their power to respected guests such as

¹¹ In the PRC the term "transcendental meditation" has been proposed as an English equivalent of "qigong" (*EFHB Research*, Vol. 1, No. 1, p. 8). This is inappropriate because the way qigong is practiced (which, in many cases, is not placid) does not conform to the impression that the word "meditation" conveys, let alone to the Transcendental Meditation of Maharishi Mahesh Yogi. Qigong has nothing to do with the modern New Age movement, nor should it be equated with Indian yoga. The practices of qigong and yoga are different, although they undoubtedly have a fundamental relationship.

Dr. Qian, who said he was once knocked down by the "qigong external emission" applied at a distance upon his request by an anonymous host, but usually they do not accept a psi researcher's invitation to join a scientific effort.

Maybe the mysterious effects experienced with top qigong masters will never be available for scientific study, but there are many lower-level masters who are active in China, practice their art, and offer help to others. Quite a few of them are sufficiently well trained to be able to exercise strong psi abilities. Their amazed pupils spread the word so that more and more people are attracted. This is what happened in the late 1970s after the Cultural Revolution, when an official prohibition against qigong was slowly removed. The movement did not fall under the Party's ruling of May, 1982, because researchers cleverly avoided stressing the psi aspect of qigong. A "China Qigong Science Association" was able to gain governmental approval in December, 1985 (Zhi, 1986). A rapid expansion of interest began in 1986 after several highly successful qigong demonstrations were widely publicized.

Whether by a placebo effect or otherwise, qigong methods have proved useful in the treatment of diseases, especially chronic ones for which Western medicine has no effective remedies. Qigong has also been found valuable for strengthening one's physique. As a result, qigong training courses were for the first time listed in many universities following a directive from the Education Department in late 1987 (*Qigong and Science*, 1988). Qigong treatment clinics emerged by the hundreds, and existing formal hospitals were expanded to accommodate new qigong departments. It is estimated that at least 20 million people in the PRC, many of them well educated, were practicing qigong in some form and at some level by the end of 1987 (Yi, 1987). Foreign visitors were astonished to see that the qigong learners blocked parks, courtyards, and small streets while doing their morning or evening exercises.

It is obvious that the qigong movement and the reappearance of EFHB news reports (usually in relation to qigong practices) could not have occurred in this tightly controlled country without a decision by the Party to change its earlier ruling. This was done informally. Instead of issuing a new document, the instructions were given privately and gradually by some of the Party's senior leaders.

It is widely believed that many leaders in the highest positions became interested in qigong and convinced of the reality of EFHB. In the first phase there were many specially arranged psi demonstrations, some privately performed, in an effort by some of the researchers to gain governmental support. As time went on, it was found that a better way to obtain support was to let qigong masters take care of the health of the leaders. Countless healing sessions were held, and a wide variety of effects were demonstrated. Some leaders reportedly started to practice qigong themselves. It was said, for instance, that Deng Xiaoping, the Party and military head, became interested in qigong and asked to watch the videotapes

of a qigong master's therapeutic lectures (see later). Other leaders showed their support publicly. Hu Qiaomu, the standing member of the Party's Central Political Bureau in charge of propaganda, said in a reported meeting in 1987:

We should mobilize every unit in our society to study qigong science. I believe it is a very fundamental scientific effect and absolutely not superstitious fiction. This is not something about which one "should not propagandize, or make any comment," but a topic that needs great efforts to publicize and facilitate its development to serve the four modernizations. (Li, 1988, p. 315)

This speech is clearly contrary to the former ruling and, though not mentioned, the inner quotation is from the previously-referred-to May 13, 1982, directive of Hu Yaobang, the former Party general secretary who had been subsequently removed from power. Other top leaders who expressed their support of qigong and of EFHB study were Wan Li, Ye Jianying, Wang Zhen, Pen Zeng, Pen Chong, and Wang Renzhong, almost all of them senior politicians. As final evidence of the acceptability of qigong and psi research, the application presented seven years earlier by the preliminary committee under the translated name "Chinese Human-Body Science Association" (and "China Anthropic Science Association") was at last approved on May 3, 1987, under a new officially translated name as the "Chinese Society of Somatic Science" (CSSS). Mr. Zhang Zhenhuan was elected as the CSSS's first president to honor his contributions, although he had retired from his military commission by then. The *NJ* also resumed publishing research papers explicitly on psi topics in 1987, though they are often qigong-related now. Thus, parapsychology was officially accepted as a legitimate field of science in PRC.

An important change affecting the qigong movement occurred in 1987 when Dr. Qian Xuesen was named chair of the Chinese Science and Technology Association, the semigovernmental commission that coordinates the nation's scientific research. Dr. Qian, although famous, had held no position outside the military before, but now he was granted the right to guide the nation's science policy. He did not waste this opportunity and soon gave instructions urging the furtherance of somatic science. He is quoted as saying: "Chinese qigong is modern science and technology—high technology—absolutely top technology" (Yi, 1987).

What caused Dr. Qian to offer so strong an endorsement? Aside from the prize-winning film described in Phase II above, we do not know what may have been achieved by defense-related teams such as ISME. It seems certain, however, that Dr. Qian was strongly impressed by the results more recently reported in Academia Sinica's *Shengwu Wuli Xuebao* (*Acta Biophysica Sinica*) by Lu Zuying and colleagues (Lu et al., 1987) of the Department of Chemistry and Biological Science at Qinghua University, which is the nation's foremost technological school.

In a series of experiments conducted under Lu and colleagues between

December 1986 and March 1987, qigong master Yan Xin, typically working at a distance of several kilometers, was able to create, shift, or intensify absorption peaks in the infra-red, ultra-violet, and paramagnetic resonance spectra of biological media. In other cases, chemical phase-change parameters were shifted.

Concerning these results, Dr. Qian Xuesen made the following recommendation to the editors of the *Acta Biophysica Sinica*:

The content of this paper is highly original. It has indeed indisputably proved that man can change the molecular properties of a substance without touching it. It is unprecedented work. Therefore, it should be published immediately, to announce this Chinese achievement to the whole world. (Qian Cheng & Zhou, 1988, p. 283)

Born in 1950 in Jiangyou county, Sichuan Province, Yan Xin is currently one of China's foremost qigong masters. Mr. Yan began to practice qigong in his early childhood and was a pupil of Hi Deng Fashi, a famous Chinese "wushu" (martial arts) and qigong master. Unlike many other qigong students, Mr. Yan later attended school and graduated as a doctor from Chengdu Traditional Chinese Medicine College. He became famous in Chongqing city for his "qi-emission" healing. It was repeatedly reported that patients, including those with multiple bone fractures, were cured and able to return to work immediately as a result of Yan's treatment. The cured bones were reportedly x-rayed before and after by medical doctors (Ao, 1986; Pang & Chen, 1986). Yan's patients, who numbered in the hundreds, began to write articles telling of his achievements (Yang et al., 1988). As a result of the spread of these stories by local news media, Yan came to Beijing in late 1986, where he did the PK experiments described above (Lu et al., 1987), and published in more detail later in *NJ* (Li et al., 1988; Yan, Li, Liu et al., 1988; Yan, Li, Yang, & Lu, 1988; Yan, Li, Yu et al., 1988; Yan, Zhao et al., 1988; Yan, Zheng et al., 1988) that excited Chairman Qian, as well as other experiments with physical effects (Yan, Lu, An et al., 1988; Yan, Lu, Zhang et al., 1988).

For the general public, Yan Xin's fame came mostly from his therapeutic lectures, which were referred to as "lectures carrying the qigong effect." These lectures were usually very long, lasting 6 to 14 hours. More than 100 were given, with audiences as large as 30,000. In some cases, towns were nearly emptied and factories declared a holiday to allow their workers to attend the lectures. It was reported that during the course of these lectures many audience members were cured as "the healing qi filled the room." Paralyzed patients in wheelchairs stood up and walked with tears of gratitude; cripples who came in on crutches walked out on their feet; patients' gall stones disintegrated; diabetes was mitigated; cancers went into remission; and pains, in general, disappeared (Qiu, 1988; You & Li, 1988; Wang & Gu, 1988). While remaining on the stage, Yan talked only about the power of qi emission treatments and taught preliminary practice methods, meanwhile "releasing qi" as he talked. The

claimed miracles happened by themselves without his direct individual attention.

To verify these unbelievable effects, research groups from the Academia Sinica's Institute of Atomic Energy and other units slipped into lecture halls without telling the master, bringing with them various radiation measuring instruments. They obtained records of broad-band radiations of greater magnitude than their control recordings, but perhaps the most interesting datum gathered was the reported fact that during a 14-hour, non-stop lecture, only 43 out of the estimated 1,400 people in the audience left the hall even temporarily, and of these, many went directly to pick up their children from closing kindergartens. The remainder of the audience had water but no food and did not leave even to visit restrooms (Qian & Zhou, 1988, p. 229; You & Li, 1988, p. 164). Evidently, their mental concentration was so intense that some physiological functions were largely suspended.

Yan's demonstrations may pose more questions than science can hope to answer. It is said that several scholars in Qinghua University initially were excited participants when Yan performed various transformations of the physical characteristics of samples at a distance of several meters, but they grew fearful and withdrew upon observing that the same results were being obtained when the master was at Guangzhou city, over 2,000 kilometers away from the samples being affected. (The distance would suggest a teleological process rather than one governed by the inverse-square law.) If these reports are true, the matter-mind relation must be more profound than most Western parapsychologists are willing to imagine.

There are still other top qigong masters besides Yan Xin in China today: Chen Linfong, Mong Haunzhang, Wu Huawen, Wang Baojing, Huang Zenzhong, Wang Liping, Qiu Guanliang, Zhang Zhixiang, to name but a few. The whole attitude of society toward qigong has changed. Stories of these masters appear daily in the news media, including major national publications such as the *People's Daily*. An International Qigong Science Convention was held in October, 1988, in Beijing at which 142 papers from six Asian countries were presented, including many from members of the newly approved CSSS (Feng, 1988).

Qigong medicine is taking on some of the roles of behavioral medicine in the U.S. For example, a "China Qigong Cancer Treatment Research Association" was formed as a branch of the China Cancer Research Foundation in February, 1989. It is said to include 3 research institutes, 4 hospitals, 2 recovery centers, and 14 regional organizations (*Qigong*, 1989).

An example of the changing academic prospects for parapsychology in China is the thriving civilian research group headed by Prof. Lin Shuhuang at Beijing Teacher's College, one of the most active and productive teams throughout the 1980s. In the middle of the decade, Prof. Lin in the Physics Department of the College found it difficult to survive academically because his psi work was not formally accepted. Now, however, he

has been promoted to the position of head of the College's Scientific Research Coordinating Office. Still spending most of his energy on psi research, he and his colleagues have been able formally to establish a "Comprehensive Technology Institute" which has gained official support from the Chinese National Science Foundation, as well as at state, ministry, and commission levels, thereby allowing Lin to continue his somatic science work.

DISCUSSION

Most Westerners will find it hard to believe that parapsychology could gain so much momentum in a communist country where materialism is supposedly dominant. The explanation is to be found at the level of cultural philosophy. While there are, of course, personal convolutions, political ideologies are irrelevant in this matter.

Western culture is Cartesian in that it divides reality into material and spiritual parts and assigns to revealed religion all responsibility for the spiritual. Western science is neo-Cartesian in that it has long regarded consciousness as an impotent epiphenomenon. Only quite recently has any scientist of stature asserted that consciousness must have causal efficacy *within* the body (Popper & Eccles, 1977; Sperry, 1983). Because parapsychology seeks to relate consciousness to the physical world at large, its study is resisted both by theologians and by sophisticated scientists in the West (Honorton, 1982; McConnell, 1983, pp. 49-52; McConnell, 1987, p. 208).

Traditionally, the Chinese have much less of a dichotomy in their thinking. While borrowing empirical scientific methodology from the West, many Chinese have retained their own essentially unitary view of nature and have no philosophical quarrel with parapsychology in their traditions. This may be the key to the large difference between the prevalence and magnitude of psi effects in China and in Western laboratories. Western parapsychologists may be unknowing victims of their cultural heritage.

Chinese researchers have been very successful in presenting psi through qigong and Traditional Chinese Medicine as something with distinctive Chinese national characteristics,¹² a field of study in which China could lead global efforts and reflect the glory of its brilliant culture. Most Party leaders seem to believe so. Currently, researchers do not usually experience much trouble from political or ideological directions. After the Beijing events of June, 1989, reports concerning qigong and EFHB studies have increased to a rate of about six per month in the *People's Daily*, the main official newspaper.

A second International Qigong Convention (along with "The First Na-

¹² In the appendix we review studies of psi with "Chinese characteristics."

tional Old People's Qigong Study Convention") was held September 10-15, 1989 in Xian, the ancient capital city of Shanxi Province. More than 600 papers were exhibited, of which 70 percent were from universities and other scientific research units. This dual convention attracted qigong enthusiasts from all over the nation and, as in the 1988 convention, many scientifically dubious activities took place in the anterooms and on the streets (Huang, Wang, & Wei, 1989). A "World Academic Society of Medical Qigong" with members ranging over 20 countries was formed in November, 1988, with Mr. Xi Zhongxun, vice-chairman of the China's People's Congress Standing Committee, and Mr. Chui Yueli, former minister of the Department of Medicine, as Honorary Chairman and Chairman, respectively (Feng, 1989).

At this time, the "Second National Conference of the Chinese Society of Somatic Science" was held (separately from the International Qigong Convention) on November 14 to 17 in Beijing with an attendance of about 250. Opening remarks were given by Mr. Zhang Zhenhuan, the president of the CSSS, whom we had mentioned earlier as a supporting military officer. After two plenary sessions, the conference divided into separate physical and medical sections of three sessions each. The conference re-joined in a closing plenary session to hear an address by Professor Chen Hsin, whom we have identified above as having represented the ISME at the parapsychological convention at Cambridge University in 1982.

Evidently the senior leaders of China, now firmly in power, are favorable to the public study of qigong and related EFHB. It is ironic that Mr. Yu Guangyuan, the one who opposed psi most strongly in 1981, is currently criticized in newspapers for his "capitalistic" economic conduct in the reform movement in the late 1980s and for his political association with Zhao Ziyang, Hu Yaobang's brief successor. Judging from the favorable publicity he has received in the *People's Daily*, Dr. Qian Xuesen, on the other hand, retains his position of scientific pre-eminence (Yu & Shu, 1989).

For a Western parapsychologist, all of this Chinese activity could be both encouraging and disturbing. Given the nature of psi, it is inevitable in any culture that parapsychology, as it gains scientific acceptance, will be bedeviled by runaway popular interest accompanied by commercialization and fraud. In a field where there is, as yet, no possible certification of ability, no limits to what can be claimed, and only a glimmering of scientific understanding, it is to be expected that many persons with little or no psychic ability will offer their wares to an eager public. Sooner or later, this will result in an adverse reaction at a high political level unless vigorous steps are taken to isolate and to publicly legitimize the scientific approach.

Maintaining the distinction between professional parapsychology and popular occultism is especially difficult because parapsychology is largely dependent for its experimental data upon gifted psychics who do not often understand the scientific method. A still further constriction is the para-

psychologist's wish not to criticize professional psychics who choose to use their special gifts to help other people even though their efforts are often expressed in an envelope of superstition.

Thus, while rejoicing in the encouraging progress of parapsychological studies in China, we hope cordially that more purely scientific and robust achievements will come in its culturally distinctive way from this great Oriental nation.

REFERENCES¹³

- AO DALUN. (1986). Realities and the myths around us. *Qigong Yu Kexue (Qigong and Science)*, No. 3.
- CHAI JIANYU, & ZHAO YONG. (1981). A preliminary detection of interactions between the extraordinary function of the human body and matter. *Ziran Zazhi (Nature Journal)*, 4, 892-894, 936.
- CHEN HSIN, & MEI LEI. (1983). Study of the extraordinary function of the human body in China. In W. G. Roll, J. Beloff, & R. A. White (Eds.), *Research in Parapsychology 1982* (pp. 278-282). Metuchen, NJ: Scarecrow Press. (In English)
- CHEN YI, LI CHUNPU, HAO SHUCHENG, CHENG SHAOEN, YAN HONG-CHENG, LI SHOUCHEG, LIU XINGDE, QI YUHUA, FENG CHUNFENG, ZHANG TIANHUA, GUAN TONGLIN, WANG ZHILIANG, GAO FENG, GAO CHUNCHENG, WANG ZHEYUE, YUE PEIZHI, & LU FENGQIN. (1981). Preliminary results of human magnifying function. *Ziran Zazhi (Nature Journal)*, 4, 185-186.
- CHENG SHOULIANG, HE MUYAN, WANG CHU, ZHENG LEMIN, ZHAO SHAOYUAN, ZHANG ZUQI, LIU ZHAOQIAN, & WU BAOGANG. (1979). Preliminary report on a special inductive function in the human body (II): The generality question. *Ziran Zazhi (Nature Journal)*, 2, 334-335.
- COMBINED COMMITTEE FOR EFHB TESTS. (1983). Report on tests of the authenticity of EFHB. *Renti Teyigongneng Yanjiu (EFHB Research)*, 1, 9-22.
- DONG, P. (1984). *The Four Major Mysteries of Mainland China*. Englewood Cliffs, NJ: Prentice-Hall. (In English)
- EFHB RESEARCH GROUP OF YUNNAN UNIVERSITY. (1981). Preliminary measurements of EFHB mechanical effect. *Ziran Zazhi (Nature Journal)*, 4, 347-350.

¹³ In the PRC, authoritative statements about sensitive topics frequently appear in serial publications of restricted circulation. Later, these statements may be quoted or paraphrased in an unrestricted journal and, in this way, become available for quotation in writings intended for foreign publication. In China, papers abstracted in another journal keep their original titles unless otherwise indicated. In the present list, references are in Chinese unless notated "(In English)." The reader will notice the absence of Chinese research papers in foreign journals. Such papers would require official approval before submission, and, for the present, such approval is not likely to be forthcoming.

- FENG JUNJUN. (1988, October 12). The first international qigong convention. *Renmin Ribao (People's Daily)* (mainland edition), p. 2.
- FENG JUNJUN. (1989, November 18). World Medical Qigong Institute born in Beijing. *Renmin Ribao (People's Daily)* (overseas edition), p. 4.
- HE MUYAN, SHAO SHAOYUAN, ZHANG ZUQI, LUO LINER, CHEN SHOU-LIANG, WANG CHU, LIU ZHAOQIAN, & WU BAOANG. (1980). Further study on the wide occurrence of the special inductive function of the human body. *Ziran Zazhi (Nature Journal)*, 3, 683, 674.
- HONORTON, C. (1982). Parapsychology and the mind-body problem. In R. A. McConnell (Ed.), *Encounters with Parapsychology* (pp. 146-154). Pittsburgh, PA: Editor. (In English)
- HSIN PING. (1975). The rampancy of parapsychology and the decline of the superpowers. *Scientia Sinica*, 18(4), 573-580. (In English)
- HU YAOBANG. (1982). An instruction about the EFHB question. *Renti Teyigongneng Tongxun (EFHB Bulletin)*, Nos. 24 & 25, 1.
- HUANG HUE, WANG GUOSHEN, & WEI MING. (1989, October 29). A profile of the two qigong conventions. *Zhongguo Tiyu Bao (China Sports News)*, pp. 1, 3.
- HUO YAOHUA. (1987). Qigong miracles and research developments. *Kexue Zhiyou (Your Scientific Friends' Magazine)*, 1987, No. 12. [From *Xinhua Wenzhai (New China Digest)*, 1988, No. 2, 172-175]
- JEN, C. K. (1983). Some demonstrations on extraocular image in China. In R. A. McConnell (Ed.), *Parapsychology and Self-Deception in Science* (pp. 5-17). Pittsburgh, PA: Editor. (In English)
- KURTZ, P., ALCOCK, J., FRAZIER, K., KARR, B., KLASS, P. J., & RANDI, J. (1988). Testing psi claims in China: Visit by a CSICOP delegation. *Skeptical Inquirer*, 12, 364-375. (In English)
- LI SHENGPING. (1988). New budding in qigong research. In Qian Cheng & Zhou Xin (Eds.), *Yan Xin and Qigong* (pp. 308-323). Beijing: Workers' Press.
- LI SHENGPING, MENG GUIRONG, SUN MENGYAN, CHUI YUANHAO, AN SHIXIAN, & YAN XIN. (1988). Experimental study on the effect of qigong emission on the molecular structure of matter at a distance of 2,000 km. *Ziran Zazhi (Nature Journal)*, 11, 770-775.
- LIN SHUHUANG, ZHANG CONGQI, LIU HUIYI, HUANG YUCHUN, ZHOU BINGHUI, ZHANG HANSIN, SHEN XIANJIA, DONG ZHENGWU, DING SHIYIN, ZHANG XUEKAI, CHEN FANG, & ZHUANG ZHEXIANG. (1981). Some experiments on the transfer of objects performed by the "unusual functions of the human body." *Ziran Zazhi (Nature Journal)*, 4, 652-661.
- LIN SHUHUANG, ZHOU BINGHUI, LIU HUIYI, HUANG YUCHUN, ZHANG HANSIN, RAO ANLI, LIU GUONAN, LIN LIN, LIU YICHENG, YANG JIANHUA, SUN ZHEXIAN, HE QINGNIAN, ZHAO YIJUN, ZHANG MING, DING YIZHONG, ZHANG YU, ZHUANG DING, LI ZHICHAO, & DING

- SHIYIN. (1983). PK experiments: Objects moved into or out from sealed containers. *Renti Teyigongneng Yanjiu (EFHB Research)*, 1, 110-118.
- LU ZUYING, ZHAO NANMING, LI SHENGPING, ZHENG CHANGXUE, & YAN XIN. (1987). Observations on qi emission effects on the structure and properties of some substances. *Shengwu Wuli Xuebao (Acta Biophysica Sinica)*, 3, 93-94.
- MCCONNELL, R. A. (1983). *Introduction to Parapsychology in the Context of Science*. Pittsburgh, PA: Author. (In English)
- MCCONNELL, R. A. (ED.) (1987). *Parapsychology in Retrospect: My Search for the Unicorn*. Pittsburgh, PA: Editor. (In English)
- NATURE JOURNAL EDITORIAL REPORT. (1980). Comrade Qian Xuesen's visit to our journal. *Ziran Zazhi (Nature Journal)*, 3, 587.
- PANG YOUZHONG, & CHEN GUANGMAN. (1986, November 18). Yan Xin, doctor of traditional Chinese medicine, treats patients from afar. *Guangming Ribao (Guangming Daily)*.
- POPPER, K., & ECCLES, J. C. (1977). *The Self and Its Brain: An Argument for Interactionism*. New York: Springer International. (In English)
- PUTHOFF, H. E. (1983). Report on investigations into "Exceptional Human Body Function" in the People's Republic of China. In W. G. Roll, J. Beloff, & R. A. White (Eds.), *Research in Parapsychology 1982* (pp. 275-278). Metuchen, NJ: Scarecrow Press. (In English)
- QIAN CHENG, & ZHOU XIN. (1988). Editorial comment in *Yan Xin and Qigong* (pp. 283-284). Beijing: Workers' Press.
- QIAN XUESEN. (1981). Launching the fundamental researches of human body science. *Ziran Zazhi (Nature Journal)*, 4, 483-488.
- QIAN XUESEN. (1983). Is it an unborn scientific revolution? *Renti Teyigongneng Yanjiu (EFHB Research)*, 1, 3-8.
- QIAN XUESEN, & CHEN HSIN. (1988). Somatic science is a big branch of science in the modern system of science and technology. *Ziran Zazhi (Nature Journal)*, 11, 331-338.
- Qigong*. (1989). [Unsigned news item.] 10(5), 228.
- Qigong and Science*. (1988). [Unsigned news item.] No. 1, page 4.
- QIU WEINAN. (1988). Receiving qigong treatment while listening to Yan Xin's lectures. In Qian Cheng & Zhou Xin (Eds.), *Yan Xin and Qigong* (p. 241). Beijing: Workers' Press.
- SPERRY, R. W. (1983). *Science and Moral Priority: Merging Mind, Brain, and Human Values*. New York: Columbia University Press. (In English)
- TENG, L. C. (1981). Letter to the editor. *Journal of the Society for Psychological Research*, 51, 181-183. (In English)
- TRUZZI, M. (1982). Chinese parapsychology: A bibliography of English language items. *Zetetic Scholar*, No. 10, 143-145. (In English)
- TRUZZI, M. (1985, January). China's psychic savants. *Omni*, pp. 62, 64, 66, 78, 79.
- TRUZZI, M. (1987). Chinese parapsychology: A bibliography of English

language items. Part II. *Zetetic Scholar*, Nos. 12/13, 58–60. (In English)

- WANG JIN, & GU CHUNJIANG. (1988). Qigong's theory and practice—a Yan Xin lecture in Central Party School. In Qian Cheng & Zhou Xin (Eds.), *Yan Xin and Qigong* (pp. 71–151). Beijing: Workers' Press.
- YAN XIN, LI SHENGPING, LIU CHONGHUI, HU JINGUI, MAO SHANHONG, & LU ZUYING. (1988). The disproportionation of CO and H₂ mixture induced by qigong. *Ziran Zazhi (Nature Journal)*, 11, 651–652.
- YAN XIN, LI SHENGPING, YANG ZENGJIA, & LU ZUYING. (1988). The substitution of n-hexane by bromine induced by qigong. *Ziran Zazhi (Nature Journal)*, 11, 653–655.
- YAN XIN, LI SHENGPING, YU JIANYUAN, LI BAIKE, & LU ZUYING. (1988). The effect of qigong on the Raman spectra of tap water, saline and glucose solution. *Ziran Zazhi (Nature Journal)*, 11, 567–571.
- YAN XIN, LU ZUYING, AN SHIXIAN, & LI SHENGPING. (1988). The effect of qigong on the polarization plane of a laser beam. *Ziran Zazhi (Nature Journal)*, 11, 563–566.
- YAN XIN, LU ZUYING, ZHANG TIANBAO, WANG HAIDONG, & ZHU YUNSHENG. (1988). The effect of qigong on the counting rate of ²⁴¹Am radioactivity. *Ziran Zazhi (Nature Journal)*, 11, 809–812.
- YAN XIN, ZHAO NANMING, YI CHANGCHENG, & LU ZUYING. (1988). The influences of qigong on the phase behaviors of liposome and liquid crystal. *Ziran Zazhi (Nature Journal)*, 11, 572–573, 566.
- YAN XIN, ZHENG CHANGXUE, ZHOU GUANGYE, & LU ZUYING. (1988). The hyperchromic effects on nucleic acid solutions induced by qigong. *Ziran Zazhi (Nature Journal)*, 11, 647–649.
- YANG JIXIANG, SONG DIANZHANG, LIU TIEGANG, & WANG YUZH. (1988). Letters from patients on Yan Xin's qigong curing effects. In Qian Cheng & Zhou Xin (Eds.), *Yan Xin and Qigong* (pp. 232–240). Beijing: Workers' Press.
- YI YAO. (1987). Somatic science, the wave of the future? *Liao Wong (Prospects Weekly)*, 1987, Nos. 48 and 49. [From *Xinhua Wenzhai (New China Digest)*, 1988, No. 2, 169–173].
- YOU XILIANG, & LI GUOJING. (1988). Yan Xin on the qigong as a science. In Qian Cheng & Zhou Xin (Eds.), *Yan Xin and Qigong* (pp. 152–200). Beijing: Workers' Press.
- YU GUANGYUAN. (1982a). Psi and its variant—the extraordinary functions of the human body. *Zhongguo Shehui Kexue (China Social Sciences)*, No. 2, 41–48.
- YU GUANGYUAN (1982b). An important matter to China philosophical front in 1981. *Zhongguo Zhexue Nianjian (1982 Chinese Philosophical Almanac)*, pp. 21–25. Beijing: China Encyclopedia Press.
- YU QINGTIAN, & SHU KUOSHAN. (1989, August 5). News item in *Renmin Ribao (People's Daily)* (mainland edition), p. 1.
- ZHAO YONGJIE, XU HONGZHANG, SHEN JING, & ZHENG ZHIPENG. (1983). Photo-multiplier detector experiments on human body radiation. *Renli Teyigongneng Yanjiu (EFHB Research)*, 1, 154–156.

- ZHI NAN. (1986). [News item.] *Qigong*, 7(3), 100.
- ZHU ZONGXIANG. (1986). The advances and prospect in physiological and biophysical approaches to the acupuncture meridian system. *Ziran Zazhi (Nature Journal)*, 9, 327-332.
- ZHU ZONGXIANG, XU RUIMIN, ZHOU GANG, LE SOYU, YU SHUZHUAN, XIE JUNGUO, & WANG DETIAN. (1986). A study on the low impedance characteristics of the meridian lines before and after amputation. *Ziran Zazhi (Nature Journal)*, 9, 281-287.

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APPENDIX

Psi Studies with "Chinese Characteristics"

Chinese leaders have often said that their goal is "modernization with distinct Chinese characteristics." The generally favorable response to psi research by these leaders may stem in great part from the fact that Chinese "somatic science" is not perceived as an adjunct to Western science but as a peculiarly Chinese endeavor. The following ideas would seem to support this point of view.

1. Historical foundations of somatic science

As previously stated, the three disciplines, Exceptional Functions of the Human Body, qingong, and Traditional Chinese Medicine (TCM) are considered to have risen from a common background. The ancient Chinese theory of qi and its systematic approaches constitute most of the foundation. For instance, EFHB is thought to depend on the presence of qi in appropriate parts of the body, and "jinluo" (the traditional "meridian lines network") is the claimed channel for qi. Evidence for the physical existence of meridian lines was recently reported by medical groups (Feng, 1988; Zhu, 1986; Zhu et al., 1986). These lines are thought to be the basis upon which TCM acts to adjust the human system to fight disease or to improve health, as in acupuncture practice. The theories of TCM, which espouse the interaction of several basic elements such as "qi," "xue (blood)," "yin (negative)," and "yang (positive)," can be used to explain many diseases and symptoms at a descriptive level and to provide guidance for treatment. The theory is somewhat idealistic, and its various elements are not measurable. (Unfortunately, Western parapsychology has no better theory to offer.) Dr. Qian Xuesen, who thinks of qi as a kind of informational continuity of essential importance to all living things, emphasizes the necessity for psi researchers to study TCM theory and qigong practices.

2. Emphasis on gross ("macro") effects

The availability of skilled EFHB practitioners as well as qigong masters said to be able to produce gross psi effects seems to have eliminated the need for statistical analysis in much of Chinese somatic science research. Statistical treatment is, however, often used in healing-related studies. Many Chinese researchers are seemingly a little reluctant to conduct Western-style micro-PK experiments, for example, with random event generators.

It is unfortunate from the point of view of the Western parapsychologist that gross PK experiments are not, in fact, reproducible in the PRC fully upon demand. Moreover, gross PK events, because of their singular and unpredictable nature, are more difficult to document convincingly than micro-PK events.

3. Instrumental simplicity and experimental control

Many Chinese researchers do not like to use complicated scientific instruments directly in front of their subjects because, reportedly, in many cases, subjects have demonstrated their ability to act upon an instrument itself instead of through its sensing element, so that what really happens is never known. Therefore, in many cases the design strategy of experimenters has been "the simpler, the better." For example, a majority of PK tests are done with simple targets without the involvement of any electronic apparatus to directly monitor the results. These targets, however, must satisfy "three requirements," which have been widely adopted for all formally conducted and reported trials:

1. Targets must, in general, be unique so as to be impossible or extremely difficult to duplicate. Double-blind procedures should be followed when possible.
2. Targets must be sealed using tamper-proof methods—"irreversible" is the Chinese term.
3. There must be continuous, on-site, multi-angle observation by experimenters or by videotape.

These requirements have led researchers to believe that their reported results are real, and that the effect is PK acting on the target. When the use of modern instruments becomes unavoidable, it is believed that the experimental protocol must be arranged so that the subject is away from the instruments and without knowledge of when or how the surveillance and analysis of targets is performed.

4. Psi as a personally developable skill

It is assumed as a matter of course in PRC that psychic ability, as well as other benefits, can be developed through the practice of qigong. In the West, by contrast, the serious literature largely ignores training and stresses conditions at the time of the experiment.

5. Areas not studied

Although investigations of apparitions, poltergeists, hauntings, and survival of death (including mediumship, channeling, and reincarnation) are not formally banned in PRC, these topics are often considered to be sensitive, and thus are not reported as being formally studied because of concern about their ideological inappropriateness under the compelling guidelines of Marxist materialism. Moreover, researchers are comparatively ignorant concerning these psychic research topics. Some experimenters briefly investigated such areas earlier, but soon became targets for attack by Mr. Yu Guangyuan and others. It seems that no one has mentioned these topics openly since then.